

Express Mail No.:EL844539396 US Date of Deposit: August 9, 2002

Attorney's Docket No: L00461/70104

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Luiten et al.

Serial No.:

09/766,889

Filed:

January 19, 2001

For:

MAGE ANTIGENIC PEPTIDES WHICH BIND HLA-B35 and HLA-B44

Examiner:

L. Spector

Art Unit:

1647

Conf. No.:

9782

Box Non-Fee Amendment Commissioner for Patents Washington, DC 20231

RECEIVED

AUG 1 5 2002

Sir:

**TECH CENTER 1600/2900** 

Transmitted herewith are the following documents:

[X]

Response to Requirement for Information Under 37 C.F.R. 1.105

[X]

Two pages of Schematic Drawings Showing Peptide Alignments

[X]

Preliminary Amendment

[X]

Substitute Sequence Listing - paper copy and computer readable form

Statement Under 37 C.F.R. 1.821(f) and 1.825(a) and (b) [X]

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (617)720-3500, Boston, Massachusetts.

No check is enclosed. If a fee is determined to be required, please charge the fee to the account of the undersigned, Deposit Account No. 23/2825. A duplicate of this sheet is enclosed.

Respectfully submitted,

John R. Van Amsterdam, Reg. No. 40,212

WOLF, GREENFIELD & SACKS, P.C.

600 Atlantic Avenue

Boston, Massachusetts 02210

Tel: (617) 720-3500

Attorney's Docket No. L00461/70104

Dated: August 9, 2002

X08/11/02



Express Mail No.:EL844539396 US Date of Deposit:August 9, 2002

Attorney's Docket No: L00461/70104

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Luiten et al.

Serial No.:

09/766,889

Filed:

January 19, 2001

For:

MAGE ANTIGENIC PEPTIDES WHICH BIND HLA-B35 and HLA-B44

Examiner:

L. Spector

Art Unit: Conf. No.: 1647 9782

Box Non-Fee Amendment Commissioner for Patents Washington, DC 20231

### RESPONSE TO REQUIREMENT FOR INFORMATION UNDER 37 C.F.R. 1.105

Sir:

Applicants hereby respond to the requirement for information under 37 C.F.R. 1.105 mailed on July 11, 2002. The Examiner required that the following information be supplied.

## 1) Confirmation that SEQ ID NO:1 is MAGE-A1, and that SEQ ID NO:54 is MAGE-A3.

Applicants confirm that the nucleotide sequence of MAGE-A1 is SEQ ID NO:1 (the amino acid sequence is SEQ ID NO:2), and that the nucleotide sequence of MAGE-A3 is SEQ ID NO:54 (the amino acid sequence is SEQ ID NO:55). This information was supplied in the specification in several places, e.g., in the first paragraph of the Summary of the Invention on page 4 of the application.

#### 2) A listing of shorter sequences that correspond to the full length sequences.

MAGE-A1 polypeptide (SEQ ID NO:2):

SEQ ID NO:5 aligns with residues 161-172 of SEQ ID NO:2

SEQ ID NO:6 aligns with residues 163-172 of SEQ ID NO:2

SEQ ID NO:7 aligns with residues 163-171 of SEQ ID NO:2

SEQ ID NO:8 aligns with residues 161-169 of SEQ ID NO:2

SEQ ID NO:9 aligns with residues 160-169 of SEQ ID NO:2

Art Unit 1647

SEQ ID NO:10 aligns with residues 162-169 of SEQ ID NO:2 SEQ ID NO:12 aligns with residues 148-169 of SEQ ID NO:2 SEQ ID NO:14 aligns with residues 161-169 of SEQ ID NO:2

- 3 -

SEQ ID NO:16 aligns with residues 162-169 of SEQ ID NO:2 SEQ ID NO:53 aligns with residues 161-169 of SEQ ID NO:2

MAGE-A3 polypeptide (SEQ ID NO:55):

SEQ ID NO:56 aligns with residues 168-176 of SEQ ID NO:55

SEQ ID NO:57 aligns with residues 167-182 of SEQ ID NO:55

SEQ ID NO:58 aligns with residues 170-178 of SEQ ID NO:55

SEQ ID NO:59 aligns with residues 167-176 of SEQ ID NO:55

# 3) A graphic alignment of the short sequences with the appropriate long sequences.

Applicants have enclosed herewith two graphic alignments, one each for the MAGE-A1 and MAGE-A3 polypeptide sequences and the shorter peptide sequences that correspond thereto. The alignments are also indicated by sequence range.

#### Remarks

Applicants believe they have complied with the Examiner's requirement for information. The information regarding SEQ ID NO:57 reflects the correction of the typographical error made in the accompanying Preliminary Amendment. If the information provided herewith is insufficient, the Examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted,

John R. Van Amsterdam, Reg. No. 40,212

WOLF, GREENFIELD & SACKS, P.C.

600 Atlantic Avenue

Boston, Massachusetts 02210

Tel: (617) 720-3500

Attorney's Docket No. L00461/70104

Dated: August 9, 2002

X08/11/02